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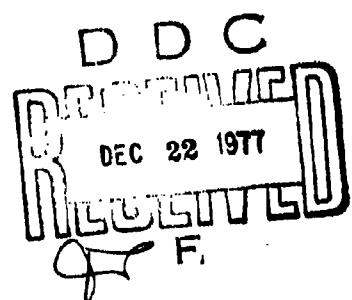
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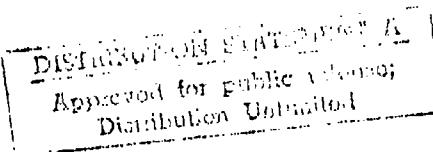
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FOREWORD

The balloon was designed by Francesco de Lama, an Italian friar, during the Seventeenth century but it was not until 5 June 1783 that a Frenchman named Montgolfier successfully lofted a balloon to approximately 6,000 feet in height. On 15 October of the same year a Mssr. deRozier achieved the first manned flight. The initial United States ascent took place on 24 June 1784. The first use of a balloon during wartime occurred when Mr. James Allen piloted one for the Federal side on 9 June 1861. The first successful aerial reconnaissance was made on 3 August of that year. Throughout the balance of the Civil War observation balloons were used by both the North and South.

In 1892 a balloon section of the United States Army's Signal Corps was formed under the direction of Brigadier General Adolphus W. Greely, Chief Signal Officer. A captive-type balloon was used in 1898 during the Spanish-American War for spotting Spanish troops near Santiago, Cuba. In 1902, Brigadier General Greely formed a balloon detachment to replace the section. The French introduced the concept of artillery spotters who technologically advised gun crews where to lay indirect fire. These balloon crews worked in captive balloons which were anchored in place and had telephone wires strung from the balloon baskets. Although pilots did not wear parachutes in 1914, balloon crews did. During 1915 Germany unleashed the Graf Zeppelin on England in a series of bombing raids.

Balloons had a shared impact along with airplanes on aerial developments and artillery philosophy at Fort Sill, Oklahoma. In July, 1915, the first military aviation unit, the First Aero Squadron, arrived for duty followed shortly after by the Third Aero Squadron. These units used aircraft to make aerial reconnaissance and fire control possible. Their airfield was a pasture on the site of the present airfield. During May, 1916 Captain F.B. Hennessey of the Field Artillery witnessed kite balloon tests at the Goodyear Plant at Akron, Ohio to check on their application for the branch. Military testing began at Fort Bliss, Texas in October, 1916. Company A, First Balloon Squadron, was formed at Fort Sill on 24 September, 1917. Balloon number "K-3" was first lofted on 26 September. The Fourth Aero Squadron arrived the same day. Construction of an airfield was begun on 8 August 1917 and was activated on 10 September 1917. It was named in commemoration of Lieutenant Henry Post who had been killed while attempting to establish an altitude record in 1914. The following year the School for Aerial Observers was founded. On completion of this two-week course the students attended the Air Service School which was located at the airfield. Upon graduation they were usually picked up by the Signal Corps which controlled the Air Service. In the fall of 1918 an agreement was reached with the Signal Corps and a joint seven-week course was begun for flying cadets and artillery observers. During World War One there were only two courses offered at Fort Sill. In addition to the Air Service program the School of Fire conducted an Artillery Officer's course to prepare artillery-men for combat in Europe. In 1921 an Air Service Observation Course was introduced but was discontinued the same year. An aerial observation unit was part of the Battery Officer Course but was discontinued after the 1921-22 school year. This was the last such course until an organic air observation course was approved on 10 December 1941. From 1942 to July, 1953 a great variety of officer, warrant, and enlisted personnel courses were offered at Henry Post Field.

Throughout most of this period balloons were in use at the Fort. The balloon hangar was constructed in 1934.

As war clouds loomed on the horizon, the United States Congress authorized a blimp fleet for coastal patrols and anti-submarine drills in 1940. Balloons were used for general low-altitude purposes throughout WWII. On 30 June 1962, the final two airships still in use were retired from service. The United States was the only nation still using lighter-than-air vehicles at the time.

It is the purpose of this bibliography to indicate materials held by the Morris Swett Library which relate to the subject. Inclusion of an item or omission does not imply USAFAS indorsement or sanction of the compiler's point-of-view nor does it guarantee accuracy of content. Comment and criticism concerning this list is solicited.

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Benjamin Franklin

PERIODICALS CITED

- UF1 Antiaircraft Journal
C7
- U1 Army Quarterly
A85
- UF3 Artilleristische Rundschau
A85
- UF7 Bulletin de Reseignements de l'Artillerie
F81
- U1 C. & G.S.S. (Command & General Staff School) Quarterly, Review of
R4 Current Military Writings, Military Review
- UA600 Canadian Army Journal
A71
- UE1 Cavalry Journal
C2
- UF1 Coast Artillery Journal
C7
- UF1 Field Artillery Journal
F6
- UD1 Infantry Journal
I6
- D767 Intelligence Bulletin (USAFPOA)
I65
- U1 Journal Military Service Institution
M6
- U1 Journal of the American Military Institute
A4
- UF1 Journal of the Royal Artillery
W8
- U1 Journal of the Royal United Service Institute
J7
- E171 Magazine of American History
M18
- VE1 Marine Corps Gazette
M3

D743 Military Report on the United Nations
U6

D770 O.N.I. Weekly
O5

UB323 Recruiting News
A32

UA560.1 Reserve Officer
R3

UG1 Royal Engineers Journal
R8

V1 United States Naval Institute Proceedings
P8

PERIODICALS

"Another Army Victory, for the Fifth Time Army Balloonists Capture the Litchfield Trophy," Recruiting News, 14:8, 9, 1932.

Arden-Close, Charles, "The Use of Balloons in War, 1784-1902," Royal Engineers Journal, 56:68-75, Mar. 1942.

Arthur, Robert, "Enter the Barrage Balloon," Coast Artillery Journal, 84:306-314, Jul-Aug., 1941.

Brigadier, Von. "Fesselballon und Artillerie," Artilleristische Rundschau, 11:452-457, Sep. 1939.

"Balloon Registration in the German Army," Bulletin de Reseignements de l'Artillerie, 11:59-108, Sep. 1918.

Barnett, E.J., "Balloon Barrage," Reserve Officer, 18:3, 4, Aug. 1941.

"British Balloon Defenses," Military Reports on the United Nations, 5:1-11, Apr. 15, 1943.

"Building Barrage Ballons," Coast Artillery Journal. 85:20, 21, Nov. 1942.

Chandler, Charles DeF. "Military Observation Balloons," Field Artillery Journal, 7:15-20, Jan. 1917.

Chandler, Charles DeF. "Observation Balloons Serving with Infantry," Infantry Journal, 16:564, 565, 1919-20.

Chavannes, Samuel H. "Notes Upon the Employment of Military Balloons," Journal Military Service Institutions, 40:289-293, 1907.

Cherry, R.G. "Balloons," Journal of the Royal Artillery, 39:153-157, 1932-33.

Crivelli, Lt. "Observation Balloons," Field Artillery Journal, 8:342-348, Jul. 1918.

Cuneo, John R. "The Balloon at Hell's Corner," Journal of the American Military Institute, 7:189-195, 1943.

Deems, Clarence, "Observation Balloons for Field Artillery, Experiments at El Paso, Texas," Field Artillery Journal, 7:114-123, Apr., 1917.

Dickman, Joseph T. "Balloons in War," Cavalry Journal, 10:103-112, 1897.

"Discussion of Free Balloons," Intelligence Bulletin, (USAFPOA), 11:6-10, Mar. 9, 1945.

"Double Parachute Link Arming System for Balloons," Military Reports on the United Nations, 6:13, 14, May 15, 1943.

"Employment of Balloon Barrage Overseas," Military Report on the United Nations, 6:7-10, May 15, 1943.

"Further Discussion on Balloons," Intelligence Bulletin, (USAFPOA), 12:13, 14, Mar 23, 1945.

"German Balloon Barrages," Military Reports on the United Nations, 18:1-3, May 15, 1944.

Glassford, William A. "The Balloon in the Civil War," Journal Military Service Institute, 18:255-266, 1896.

Hannay, D. Rainsford, "Cooperation Between Balloons and Artillery," Field Artillery Journal, 7:233-241, Jul. 1917.

Hare, Robert R., "Captive Balloon Training," Marine Corps Gazette, 27:19,20, Mar. 1943.

Hawthorne, Harry L. "Balloons and Dirigibles in War," Coast Artillery Journal, 32:107-115, 1909.

Hennessey, F.B., "Report on the Goodyear Kite Balloons," Field Artillery Journal, 6:616-620, Oct. 1916.

Huxley, A.J., "Will the Airship Return," Canadian Army Journal, 3:5-7, Sep. 1949.

"Japan: Dirigibles," Review of Current Military Writings, 7:378, Jan-Mar, 1928.

"Japanese Balloon Radar-Visibility," Intelligence Bulletin, (USAFPOA), 13:1, 2, Apr. 6, 1945.

"Japanese Balloons," Intelligence Bulletin, (USAFPOA), 9:5-8, Feb. 2, 1945.

"Japanese Paper Balloons," O.N.I. Weekly, 4:2061-2063, Jun. 27, 1945.

Jeffries, Benjamin Joy. "First Aerial Voyage Across the English Channel; Diary of Dr. John Jeffries, The Aeronaut," Magazine of American History, 13:66-88, Jan 1885.

Jones, H.B., "Military Ballooning," Journal of the Royal United Service Institute, 36:261-279, 1892.

Kearful, Jerome, "General Porter Makes History," Antiaircraft Journal, 95:19, 20, Mar. 1952.

Kendall, William H., "Barrage Balloons," C.&G.S.S. Quarterly, 22:28-31, Jul. 1942.

Lahm, Frank P., "Ballooning," Journal Military Service Institution, 38:509-514, 1906.

Lahm, Frank P., "The Relative Merits of the Dirigible Balloon and Aeroplane in Warfare," Journal Military Service Institution, 48:200-210, 1911.

Mazet, Horace S., "First Above the Battle Smoke," United States Naval Institute Proceedings, 80:655-657, Jun., 1954.

"Military Ballooning," Journal of the Military Service Institution of the United States, 43:83-92, Jul. 1908.

"Observation Balloon Weighs Anchor," Field Artillery Journal, 27:446, 447, Nov-Dec., 1937.

Parseval, A. von, "The Dragon Balloon," Coast Artillery Journal, 13:312-325, 1900.

Prosser, Walter E. "A Discussion of the War Balloon and Similar Craft, and the Best Methods of Attack by Artillery," Coast Artillery Journal, 34:257-262, Jul-Dec., 1910.

"A Report on Japanese Free Balloons," Coast Artillery Journal, 89:54-56, Mar. 1946.

"The Story of the Zeppelins," Review of Current Military Writings, 7:156, Oct-Dec., 1928.

Templer, J. "Military Balloons," Journal of the Royal United Service Institute, 23:173-184, 1879.

Thayer, Russell, "Dirigible Balloons for War Purposes," Journal Military Service Institution, 7:177-194, 1886.

Turley, R.E., "Barrage Balloons," Coast Artillery Journal, 85:20-24, Jan-Feb., 1942.

"Use of Balloons to Insure the Rapid Opening of Artillery Fire on Fleeting Targets," Field Artillery Journal, 8:611, 612, Oct. 1918.

Waters, R.S., "Ballooning in the French Army During the Revolutionary Wars," Army Quarterly, 23:327-340, 1932.

"What of the Airship," Review of Current Military Writings, 153, Oct-Dec., 1928.

Wisser, John P., "Tactical and Strategical Use of Balloons and Aeroplanes," Cavalry Journal, 21:412-424, Nov. 1910.

Wisser, John P. "The Tactical and Strategical Use of Dirigible Balloons and Aeroplanes," Cavalry Journal, 21:412-424, 1910.

Wrenn, T.W. "The Balloon Observer," Field Artillery Journal, 9:56-62, 1919.

Zalinski, Edmund L., "Hot Air Balloons," Journal Military Service Institution, 14:32-37, 1893.

BOOKS

- TL545 Alexander, J.H. Model Balloons and Flying Machines, With A Short Account of the Progress of Aviation, London, Eng: c. Lockwood, c1910.
- E492.7 Haydon, Frederick S. Aeronautics in the Union and Confederate Armies, With A Survey of Military Aeronautics Prior to 1861, Vol. I, Baltimore, MD: Haydon, c1941.
- QC852 Meisinger, Clarence LeRoy. Free-Balloon Flight in the Northeast Quadrant of an Intense Cyclone, Wash., D.C.: U.S. Dept. of Agriculture, c1919.
- UH335.1 Metal Hydrides, Inc. Hydrogen Generation for High Altitude Balloons; A Progress Report, Somerville, MA: The Co., c1960.
- TL616 Nørgaard, Erik. The Book of Balloons, N.Y., N.Y.: Crown Publ., c1971.
- TL616 Rolt, Lionel Thomas Caswell. The Aeronauts; A History of Ballooning, 1783-1903, N.Y., N.Y.: Walker, c1966.
- *UH333.1 Scholkmeyer, F.W. Six-Components Measurements on A Balloon With Various Tails, (S.L.): Braunschweig Inst. Fur Aerodynamik, c1943.
- UH31.2 Scrivner, John H. The Military Use of Balloons and Dirigibles in the United States, 1793-1963, Thesis, Norman, OK: Univ. of Oklahoma, c1963.
- TL650 U.S. Air Corps Tactical School. Airship Engineering, I, Technique of Balloon and Airship Operation, II, Langley Field, VA: The Scht, c1925.
- U5 UH335 U.S. Army Air Forces. Airship and Balloon Gas Manual, Book I, II, October, 1919-January, 1920, Wash., D.C.: USGPO, c1920.
- U55 TL651 U.S. Army Air Forces. Balloon Terms; Their Definitions and French Equivalents, Wash., D.C.: USGPO, c1918.
- U535 UH333 U.S. Army Air Forces. Methods of Obtaining and Transmitting Information by Balloon Service, Wash., D.C.: USGPO, c1918.
- U5 UH159.4 U.S. Army Air Forces. Operating Equipment for U.S. Army Observation Balloons; Tension Meters, Maneuvering Blocks, Maneuvering Spiders, Danger Cones and Clamps, Valve Testing Device, Sand Bags, Wash., D.C.: USGPO, c1921.

- UH332 U.S. Army Air Forces. Principles Underlying the Use of
U55 Balloons; A Summary of the Instructions Given by Commandant
Soconney at His School at Vadenay, Wash., D.C.: USGPO,
1918.
- D545 U.S. Army Balloon School. Balloon Operations During the
S2U5 St. Mihiel Advance and Other Notes, Arcadia, CA: The Schl.,
c1919.
- UH333 U.S. Army War College. Field Service Manual for Balloon
F8 Companies, Wash., D.C. USGPO., c1917.
#675
- *UH335.1 U.S. Barrage Balloon School. A-9 (LA) Winch Lubrication and
W6A5 and Service Chart, Camp Tyson, TN: The Schl., c1943.
#151
Vert. File
- *UH333.1 U.S. Barrage Balloon School. Barrage Balloon Barrage
U5 Control, Camp Tyson, TN: The Schl., c1943.
#147 PD
Vert. File
- *UH333.1 U.S. Barrage Balloon School. Barrage Balloon; Employment
B2A5 of Barrage Balloons, Camp Tyson, TN: The Schl., c1943.
#146
Vert. File
- *UH454 U.S. Barrage Balloon School. Barrage Balloon Site Installa-
U5 tions, Camp Tyson, TN: The Schl., c1943.
#132
Vert. File
- *UH332 U.S. Barrage Balloon School. Construction of Bed and
B2A5 Securing of Mark VII, D-7, and D-8 Balloons, Camp Tyson,
#119 PD
TN: The Schl., c1942.
Vert. File
- *UH334.1 U.S. Barrage Balloon School. Construction of Site Rigging,
U5 Camp Tyson, TN: The Schl., c1942.
#123 PD
Vert. File
- *UH335.1 U.S. Barrage Balloon School. Low Altitude Portable Barrage
W6A5 Balloon Winches and Low Altitude Barrage Balloon Flying
#148, 149 Cables, Camp Tyson, TN: The Schl., c1943.
Vert. File
- *UH335.1 U.S. Barrage Balloon School. Midship Mooring of D-8
W6A5 Balloons, Camp Tyson, TN: The Schl., c1943.
#126 PD
Vert. File

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- *U325.1 U.S. Barrage Balloon School. Purity Meter, "Metro" Type,
U5 Camp Tyson, TN: The Schl., c1943.
#130 PD
Vert. File
- *UH331.3 U.S. Barrage Balloon School. Reference Data, Camp Tyson, TN:
A5 The Schl., c1943.
#153
Vert. File
- *UH335 U.S. Barrage Balloon School. Service of the Balloon and
B2A5 Balloon Equipment Low Altitude, Camp Tyson, TN: The Schl.,
#133 0 c1943.
Vert. File
- *UH332 U.S. Barrage Balloon School. Service of the Balloon and
03A5 Balloon Equipment, Very Low Altitude, Camp Tyson, TN: The
#134PD Schl., c1943.
Vert. File
- #UH333.1 U.S. Barrage Balloon School. Weather and the Barrage Balloon,
B2A5 Camp Tyson, TN: The Schl., c1943.
#142
Vert. File
- U220.1 U.S. Chief of the Air Corps. General Notions of Organization
U52 and Tactical Suggestions Indispensable to the Balloon Observer,
Wash., D.C.: USGPO, c1918.
- UH335.1 U.S. Dept. of the Army. Barrage Balloon, Service of Cable
F6U5 Armament, Very Low Altitude, FM 4-192, Wash., D.C.: USGPO,
c1943.
- UH334.1 U.S. Dept. of the Army. Barrage Balloon, Site Installations,
B2U5 FM 4-184, Wash., D.C.: USGPO, c1943.
- UH332 U.S. Dept. of the Army. Barrage Balloon Technique, FM 4-182,
B2U5 Wash., D.C.: USGPO, c1943.
- UH333.1 U.S. Dept. of the Army. Employment of Barrage Balloons,
B2U5 FM 4-181, Wash., D.C.: USGPO, c1943.
- UH332 U.S. 1st Balloon Squadron. Balloon Maneuvering, (Tentative)
U5 for Type C-6 Motorized Balloons, Fort Sill, OK: USAFAS, c1938.
- U15 U.S. General Staff. Information Service, German Army, Wash.,
U55 D.C.: General Staff, G-2, c1940.
#17
- UH334 U.S. General Staff. Manual for Balloon Cutters, TR., Wash.,
U5 D.C.: General Staff, AGO, c1918.
#881

- U15 U.S. General Staff. Miscellaneous Observations on the German Army, Wash., D.C.: General Staff, G-2, c1940.
- U55
#71
- D570.358 U.S. War Dept. America's Munitions, 1917-1918, I-VII, Wash.,
U53 D.C.: USGPO, c1919.
- TL570 U.S. War Dept. Theory of Flight, Lighter-Than-Air, Army
A3 Extension Course, ST. 194, Wash., D.C.: USGPO, c1934.
- TL656 Ventry, Lord, Et Al, Eds. Jane's Pocket Book of Airships,
J3 New York, N.Y.: Collier Books, c1976.
- UH333 Widmer, Emil Joseph. Military Observation Balloons (Captive and Free), A Complete Treatise on Their Manufacture, Equipment, Inspection, and, and Handling, With Special Instructions for the Training of a Field Balloon Company, N.Y., N.Y.: D. Van Nostrand Co., c1917.
- W6